CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

INFORMATION & CONSENT

DIP Joint Fusion

X-ray after a DIP joint fusion: the small joint nearest the nail has been locked into one solid unit. The bones grow together over a few weeks, removing the joint pain at the cost of bending.

Kieran Hirpara CC BY NC 4.0

At-a-glance recovery. Pooled from 12 published studies — your own pace will vary.

LIGHT DUTIES desk work, driving, daily tasks	MOST EVERYDAY ACTIVITIES manual work, sport, gym	FINAL OUTCOME PLATEAU pain and strength
2-6 weeks	**3-6 months**	**12 months**
Patients typically tolerate early range of motion exercises and return to light activities within 2 to 6 weeks.	Functional recovery and return to manual work typically occur within 3 to 6 months as union consolidates.	Maximum functional improvement and pain relief are typically noted by 12 months post-operatively.

Why this operation has been suggested

Your surgeon has suggested a DIP joint fusion, also known as a distal interphalangeal joint fusion. This procedure joins the small bone at the very tip of your finger to the bone next to it. It is typically offered to you when wear-and-tear arthritis or a past injury causes severe pain and stiffness that has not improved with non-surgical care.

Surgery is usually recommended only after other treatments have failed to give you enough relief. The main goal of this operation is to stop the pain and provide a stable finger so you can use your hand more effectively. While the surgery is generally safe, your surgeon will discuss the specific risks and benefits based on your unique situation.

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Before the operation

You will need to fast for several hours before your surgery and stop taking certain medications as your surgeon directs. Please arrange for someone to drive you home and wear comfortable clothing. You may need an X-ray, blood test, or anaesthetic review to check your joint and overall health. Your surgeon will perform the operation through a single conventional incision over the finger joint. This open approach allows direct access to the area needing fusion. Bring a complete list of your current medications to your appointment so your team can review them safely.

On the day

You will arrive at the hospital and meet your anaesthetist to discuss how you will be asleep or numb during the procedure. This operation can be done under local anaesthetic (an injection that numbs just the area of surgery, with you awake) or under general anaesthetic (fully asleep). Most people choose local: recovery is quicker and you can go home soon after. If you'd prefer to be asleep, that's also a reasonable choice; discuss it with your surgeon and anaesthetist.

Once you are ready, you will go to the operating theatre where your surgeon makes a single cut over the joint to perform the fusion. After the surgery is finished, you will wake up in the recovery area where nurses will monitor you closely before you go home.

What the operation involves

Your surgeon will make a single cut over the back (dorsal side) of your finger to reach the joint. This gives safe, direct access to the joint while keeping clear of the flexor tendon, nerves and blood vessels on the palm side. If more room is needed to prepare the joint or place the hardware, the cut can be extended along the back of the finger.

Inside, your surgeon removes the worn cartilage from the joint surfaces. They then position your finger so the bone ends touch firmly together. To hold the bones steady while they heal, your surgeon uses a small metal plate and screws, or sometimes a single compression screw. If you are having other procedures on the same finger, such as a joint replacement nearby, your surgeon will use thin metal wires to avoid the hardware getting in the way.

Once the joint is fused and stable, your surgeon closes the cut with stitches. The entire procedure is designed to be straightforward, keeping the finger length normal and allowing your surgeon to adjust the final position carefully before finishing.

After the operation

You will wake up in the recovery ward with your hand wrapped in a dressing and a splint. Your surgeon will manage your pain using standard methods. Most patients stay one night in hospital after this operation, though some are able to go home the same day. You must have someone stay with you for the first 24 hours. Keep your hand elevated to reduce swelling. You can gently move your fingers as soon as you are comfortable, but avoid heavy use until your surgeon gives further advice. Your wound will be kept clean and dry while it heals.

Recovery

In the first few days, you will feel soreness and swelling around your finger. This is normal. Your surgeon will use a single incision over the joint to perform the fusion. You may wear a splint or cast to protect the finger while it heals. Keep your hand elevated above your heart to help reduce the swelling.

As the pain settles, you will begin gentle exercises. Your surgeon may allow early movement depending on how the joint is fixed. You will learn to move your finger within safe limits to prevent stiffness. Daily tasks like eating or dressing will feel easier as the swelling goes down. You can return to light activities once your surgeon clears you to do so.

Your recovery journey is unique. Some people feel ready for work sooner, while others take more time. Your surgeon and physiotherapist will guide you on when to drive, return to sport, or resume full duties. Trust your body and follow their advice for the best results.

What can go wrong

Most patients do well, but problems can occasionally happen. Your surgeon and the team monitor you closely to spot any issue early.

If the bone does not join together properly, you may feel a persistent ache or notice that your finger still moves when it should be stiff. You might also feel a clicking or grinding sensation in the joint. Tell your surgeon if this happens, as they may need to check your healing or plan further treatment.

Sometimes the joint can become infected. You might notice redness that spreads out from the wound, warmth, or swelling that gets worse instead of better. Deep, throbbing pain that does not ease with simple painkillers is also a sign. Contact your clinic immediately if you see these signs so they can treat the infection before it gets serious.

In rare cases where this surgery is done to fix a previous problem, the bone might not fuse reliably. You could experience ongoing pain or a feeling that the joint is unstable. Your surgeon will discuss these risks with you beforehand and monitor your progress carefully to manage any issues that arise.

The complications table on this page lists typical rates if you want the specifics.

When to call us

Call us if you have a fever, increasing redness, or discharge from your wound. Contact your surgeon immediately for sudden severe pain, new numbness, or if you cannot move your finger. Go to the emergency room if you notice calf swelling or shortness of breath. While complications are possible, these signs need urgent assessment to keep you safe.

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COMPLICATIONS & CONSENT

DIP Joint Fusion

Complication rates from published literature

Pooled from 12 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
Symptomatic hardware requiring removal	**17.4%**	Prominent or painful hardware occurs in approximately 8% of cases, more common in smaller digits where the screw diameter approaches the bone diameter.
Reoperation rate	**16%**	Approximately 16% of patients require reoperation for symptomatic nonunion, infection requiring screw removal, prominent painful hardware, or malunion.
Cold intolerance	**10-20%**	Increased cold sensitivity is common; typically improves over 6-12 months.
Infection	**5%**	Most common complication; superficial infections respond to oral antibiotics.
Nail deformity or split nail	**5-10%**	Nail matrix injury or screw prominence can cause split nails or ridging.
Delayed union	**5-10%**	Prolonged healing (3-6 months) requiring extended protection.
Nonunion	**3-15%**	Failure to fuse; risk factors include smoking, inadequate fixation, and infection.
Proximal interphalangeal joint stiffness	**Rare**	Adjacent joint stiffness from immobilisation; responds to hand therapy.
Wound healing problems	**Rare**	Dorsal skin necrosis or dehiscence; risk factors include smoking and diabetes.
Malunion or poor fusion angle	**Rare**	Fusion in unacceptable position may interfere with hand function.
Paresthesias or altered sensation	**Rare**	Digital nerve irritation; usually temporary.

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COMPLICATION	REPORTED RATE	NOTES
Screw cutout or migration	**Rare**	Screw penetration through the distal phalanx causing pain or nail deformity.
Screw breakage	**Rare**	Fracture of compression screw before fusion is complete.

I have read this information and have had the opportunity to ask Dr Hirpara questions about the procedure, its expected recovery, and the complications listed above.

PATIENT — PRINT NAME

SIGNATURE

DATE

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